

**Mission:**

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



**Rick Scott**  
Governor

**Celeste Philip, MD, MPH**  
Interim State Surgeon General

**Vision:** To be the **Healthiest State** in the Nation

The Florida Department of Health in Collier County cautions everyone about the health effects of wildfire smoke as a respiratory irritant, which can cause scratchy throat, coughing, headaches or irritated eyes and nose. Smoke can also worsen asthma, and other chronic lung or heart conditions. Dust generated from increased wildfire response activity on dirt roads may also worsen these conditions. Keep your family safe this wildfire season. Continue reading for frequently asked questions about wildfire smoke and health.

## **Frequently Asked Questions: Wildfires**

### **What is the health threat from wildfire smoke?**

Smoke from wildfires is a mixture of gases and fine particles from burning trees and other plant materials. Smoke can hurt your eyes, irritate your respiratory system and worsen chronic heart and lung diseases. The quantity and length of smoke exposure, as well as your age and degree of susceptibility play a role in determining whether or not you will experience smoke-related health problems. If you are experiencing serious medical problems for any reason, seek treatment immediately.

### **How can I tell if the smoke is affecting my family or me?**

Smoke can cause coughing, scratchy throat, irritated sinuses, shortness of breath, chest pain, headaches, stinging eyes and runny nose. If you have heart or lung disease, smoke might make your symptoms worse, including chest pain, rapid heartbeat, shortness of breath and fatigue. Smoke may worsen symptoms for people who have pre-existing respiratory conditions, such as respiratory allergies, asthma and chronic obstructive pulmonary disease (COPD) in the following ways:

- Inability to breathe normally
- Cough with or without mucus
- Chest discomfort
- Wheezing and shortness of breath

When smoke levels are high enough, even healthy people may experience some of these symptoms.

### **How can I protect myself and my family from the harmful effects of smoke?**

Limit your exposure to the smoke by:

- Staying indoors whenever possible
- Using air conditioners (air conditioned homes usually have lower air exchange rates than homes that use open windows for ventilation)
- Using mechanical air cleaners
- Keeping windows closed while driving in a vehicle
- Doing less strenuous physical activity (fast walking rather than jogging)
- Minimizing other sources of air pollution (smoking tobacco, using wood burning stoves, burning candles or incense, and vacuuming)

### **Will I suffocate in my house?**

No. The most common call for evacuation during a wildfire is due to the direct threat of the fire, not smoke. Leaving the area of thick smoke may be an option for those who are sensitive to smoke.

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However, it is often difficult to predict the duration, intensity and direction of smoke from wildfires. During severe smoke incidents, local clean air shelters may be designated to provide residents with a place to get out of the smoke. These places may include large commercial buildings, educational facilities, shopping malls, movie theaters or any place with effective air conditioning and particle filtration.

### **Should I wear a mask or particulate filtering facepiece respirator?**

Staying indoors is the best way to avoid exposure to wildfire smoke. The decision to use a mask or respirator when outdoors needs thoughtful consideration. A few points to consider are discussed below.

A respirator is a personal protective device that is worn on the face, covers at least the nose and mouth, and is used to reduce the wearer's risk of inhaling hazardous airborne particles. In order for a mask or a particulate filtering facepiece respirator to provide protection during a smoke incident, it must be able to filter very small particles (around 0.3 to 0.1 microns) while providing an airtight seal around the wearer's face. Paper "comfort" or "dust" masks commonly found at hardware stores are designed to trap large particles, such as sawdust. These masks will not protect your lungs from smoke. The National Institute for Occupational Safety and Health (NIOSH)-approved particulate filtering facepiece respirators are able to filter very small smoke particulates if they are properly fit to the wearer's face. It is also important to know particulate filtering facepiece respirators and masks only filter particles, not toxic gases and vapors.

Most people will find it difficult to use respirators and masks correctly for general use. For instance, it is not possible to get a good seal on individuals with facial hair. As a result, the respirator will provide little, if any, protection and may offer the wearer a false sense of protection.

Particulate filtering facepiece respirators and masks can make the work of breathing more difficult and can lead to increased breathing and heart rates. They can also contribute to heat stress. Because of this, respirator use by those with heart and respiratory diseases can be dangerous, and should only be done under a doctor's supervision. Even healthy adults may find that the increased effort required for breathing makes it uncomfortable to wear a respirator for more than short periods of time. Decisions on whether to use respirators or masks as personal protection for people who must work outside should be made on a case by case, day by day basis.

*The Florida Department of Health does not recommend the wearing of any masks or respirators for strenuous physical activity in smoke.*

### **Will a wet towel or bandana provide any protection?**

The Florida Department of Health does not recommend using wet towels or bandanas to limit exposure to smoke and particles produced by wildfires. Since wet towels or bandanas will not be sealed to the face and their capacity to filter very small particles is unknown, they will likely provide little to no protection. They are also not certified as effective respirators by the National Institute for Occupational Safety and Health (NIOSH).

### **What should I do if I must drive to work?**

Individuals can reduce the amount of smoke particles in their vehicles by keeping the windows closed. The car's ventilation systems typically remove a portion of the particles coming in from outside. For best results, individuals may want to use the recirculate air feature found in most cars, which will help keep the particulate levels lower.

### **Our community has an outdoor game scheduled for this evening. Should we cancel it?**

If you are in an area affected by wildfire smoke, limit outdoor activity and stay indoors whenever possible to minimize exposure to the smoke. Contact your local emergency management officials for more guidance.

**Do air-purifying machines help remove smoke particles inside buildings?**

Some air cleaners may be effective at reducing indoor particle levels, but most are not effective at removing gases and odors and also tend to be expensive. Some devices, known as ozone generators, personal ozone devices, “energized oxygen,” “triatomic oxygen,” “activated oxygen” and “pure air” generators are sold as air cleaners, but they are not recommended for use in occupied buildings. Ozone does not remove particles from the air and would not be effective during smoke incidents. Ozone itself is toxic and is a regulated outside air pollutant. We advise the public to avoid exposure to ozone indoors by not using air cleaners that produce ozone. For additional information, review the U.S. Environmental Protection Agency document: “Ozone Generators That Are Sold as Air Cleaners” at [www.epa.gov/iaq/pubs/ozonegen.html](http://www.epa.gov/iaq/pubs/ozonegen.html). Also, humidifiers or de-humidifiers are not technically air cleaners and will not significantly reduce the amount of particles in the air during a smoke incident.

**What should I do about closing up my house when it is so hot in there?**

If you do not have an air conditioner and if it is too warm to stay inside with the windows closed, seek alternative shelter. For additional information please visit, The Centers for Disease Control and Prevention wildfire smoke webpage, <http://emergency.cdc.gov/disasters/wildfires/smoke.asp>.

**If I have respiratory problems and can’t reach my doctor, where should I go?**

If you have a medical emergency, you should call 911 or go to the hospital emergency room immediately.

**What do I bring if I’m told to evacuate my home?**

If asked to evacuate your home, be sure to bring your important family documents (birth certificates, wills and insurance policies), valuables and your family emergency supply kit. Your kit should contain enough food, water and supplies to sustain your family and your pets for at least three days. Do not forget any medications or special items such as a first aid kit. For additional information on how to prepare your family for disasters, review the Florida Emergency Preparedness Guide at <http://www.floridahealth.gov/preparedness-and-response/documents/prepareguide-eng.pdf>.

**I operate a nonresidential building with outside air intakes. Should I close the outside air intakes during a wildfire smoke incident?**

Every nonresidential building has a uniquely designed ventilation system, where even temporary changes can have an impact on building occupants and indoor air quality. We recommend you consult with a heating, ventilation and air-conditioning professional for guidance on this issue.

**Where can I find information about the air quality in the area I live?**

The Florida Department of Environmental Protection provides updated information on outdoor air quality in Florida at [http://www.dep.state.fl.us/air/air\\_quality/airdata.htm](http://www.dep.state.fl.us/air/air_quality/airdata.htm).

**As an employee or volunteer, I am working in an area where I am exposed to wildfire smoke. What type of respiratory protection should I use?**

Consult with your employer or the agency with which you are volunteering. The U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) requires all employers to establish respiratory protection programs for their employees to use when it is deemed necessary. For additional information about respiratory protection standards, visit [www.osha.gov/SLTC/respiratoryprotection/index.html](http://www.osha.gov/SLTC/respiratoryprotection/index.html) or call OSHA at 1-800-321-OSHA or the National Institute for Occupational Safety & Health (NIOSH) at 1-800-35-NIOSH.